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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,318	01/21/2004	Tadanori Nakatsuka	00862.023406.	1545

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EXAMINER	
WASHINGTON, JAMARES	

ART UNIT	PAPER NUMBER
2625	

MAIL DATE	DELIVERY MODE
02/01/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/760,318

Applicant(s)

NAKATSUKA, TADANORI

Examiner

Jamares Washington

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,5 and 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5 and 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/14/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 4, 2007 has been entered.

Response to Amendment

Applicant's amendments and remarks received on December 4, 2007 have been entered. Claims 1, 5, and 7-10 are currently pending. Applicant's amendments and arguments are addressed hereinbelow.

Specification

In light of the cancellation of the new matter presented in the amendments received on December 4, 2007 regarding the abstract, examiner withdraws previous objection to the specification.

Claim Rejections - 35 USC § 112

In light of the amendments to the claims cancelling new matter, examiner withdraws previous claim rejections with respect to 35 USC § 112.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1 rejected under 35 U.S.C. 102(b) as being anticipated by Izuru Horiuchi (US 5646741).

Regarding claim 1, Horiuchi discloses a document display method comprising:

a determination step of determining, in a case that a display magnification of document data to be displayed is reduced, whether or not the display magnification of the document data is equal to or greater than a predetermined display magnification (Col. 1 lines 31-39 or 52-58);

an applying step of applying smoothing processing to image data of the document data if it is determined that the display magnification of the document data is equal to or greater than the predetermined display magnification (Col. 7 lines 61-66), and not applying the smoothing processing to the image data of the document data if it is determined that the display magnification of the document data is less than the predetermined display magnification (Col. 6 lines 7-11; Col. 7 lines 55-60. Suggests when the enlargement/reduction ratio is less than a predetermined value, the detection rate is raised as explained in column 7 lines 45-55. If a dither/line-gathered area is detected, the selector selects the image data which has not been smoothed, thus no smoothing processing is done (“...dither/line-gathered areas are not smoothed” at column 6 line 43. One would be more likely to detect a dither/line-gathered area as the enlargement/reduction ratio decreases.); and

a display step of displaying the image data to which the smoothing processing has been applied in said applying step or the image data to which the smoothing processing has not been applied (Col. 8 lines 15-19).

Regarding claim 7, Horiuchi discloses the method according to claim 1, wherein said determination step further determines whether or not an area of a drawing object in the document data is equal to or greater than a threshold value (Col. 5 lines 59-65), and

wherein said applying step applies the smoothing processing to the image data if it is determined in said determination step that the display magnification of the document data is equal to or greater than the predetermined display magnification (see rejection of claim 1) and the area of the drawing object is equal to or greater than the threshold value (Col. 6 lines 12-18; Therefore, even though one of the logic values of the four solid line frames is "false" thus determining the central pixel in a line-gathered area (as explained in column 6 lines 3-6) which will prevent smoothing processing, smoothing is still done because the enlargement/reduction ratio being a predetermined value or higher allows the dither/line-gathered detector to only detect a dither area).

Regarding claim 8, Horiuchi discloses the method according to claim 1, wherein said determination step further compares an area of a drawing object being displayed in a displayable area with a first threshold value and a second threshold value (see rejection of claim 7 and Col. 6 lines 3-6; "one of the logic values of the four... is false" - line gathered area) and a second threshold value (Col. 5 lines 62- 65; "all values equal true" - dither area), and

wherein said applying step applies the smoothing processing to the image data if it is determined in said determination step that the display magnification of the document data is equal to or greater than the predetermined display magnification and the area of the drawing object is equal to or greater than the first threshold value (see rejection of claim 7), or the display magnification of the document data is less than the predetermined display magnification (see rejection of claim 1) and the area of the drawing object is equal to or greater than the second

threshold value (Col. 5 lines 63-65; all values are false thus resulting in a dither area and not a dither/line-gathered area. Areas other than dither/line-gathered areas are smoothed).

Regarding claim 9, Horiuchi discloses a document display apparatus (Fig. 2) comprising:
determination means for determining, in a case that a display magnification of document data to be displayed is reduced, whether or not the display magnification of the document data is equal to or greater than a predetermined display magnification (Col. 1 lines 44-48);

means for applying smoothing processing to image data of the document data (Fig. 5 numeral 114) if it is determined that the display magnification of the document data is equal to or greater than the predetermined display magnification, and not applying the smoothing processing to the image data of the document data if it is determined that the display magnification of the document data is less than the predetermined display magnification (see rejection of claim 1);
and

display means for displaying the image data on a display unit (Col. 8 lines 17-19) to which the smoothing processing has been applied or the image data to which the smoothing processing has not been applied (see rejection of claim 1).

Regarding claim 10, Horiuchi discloses a computer-readable recording medium on which a program for causing a document to be displayed by a computer has been recorded (Col. 8 lines 24-26), said program having:

program code for determining, in a case that a display magnification of document data to be displayed is reduced, whether or not the display magnification of the document data is equal

to or greater than a predetermined display magnification (Col. 8 lines 24-26; see rejection of claim 1);

program code for applying smoothing processing to image data of the document data if it is determined that the magnification of the document data is equal to or greater than the predetermined display magnification, and not applying the smoothing processing to the image data of the document data if it is determined that the display magnification of the document data is less than the predetermined display magnification (Col. 8 lines 24-26; see rejection of claim 1); and

program code for displaying the image data on a display unit to which the smoothing processing has been applied in said applying step or the image data to which the smoothing processing has not been applied (Col. 8 lines 24-26; see rejection of claim 1).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horiuchi in view of Tetsuomi Tanaka (US 5715336).

Regarding claim 5, Horiuchi discloses the method according to claim 1.

Horiuchi fails to disclose or suggest wherein the image data of the document data contains a character image.

Tanaka, in the same field of endeavor, teaches wherein the image data based on the document data contains character image ("... character recognition method capable of preventing deterioration in the feature vectors resulting from normalization or smoothing" at column 2 lines 20-23).

It would have been obvious to one of ordinary skill in the art at the time the invention was made for the image data of the document display method wherein smoothing processing is applied based on a display magnification as disclosed by Horiuchi to contain a character image as taught by Tanaka to fix the problem from an image enlargement reducing the diagonal components and increasing the vertical and horizontal components as the ratio of image enlargement becomes larger and an image reduction reducing the vertical and horizontal components and increasing the diagonal components, as the ratio of image reduction becomes larger when outputting characters.

Response to Arguments

Applicant's remarks: Regarding the argument that Horiuchi does not teach or suggest determining whether or not the display magnification of the document data is equal to or greater than a predetermined display magnification in a case that a display magnification of document data to be displayed is reduced and that Horiuchi thus fails to apply a smoothing processing to image data of the document data based on such a determination,

Examiner's response: The ratio of the "enlargement/reduction" compares the image data amount by which it is enlarged to how much it is reduced and thus makes a determination as to whether smoothing will commence or not. The fact that the "ratio" is taken into account and not just an "enlargement" rate or value indicates the image is enlarged and/or reduced and it is this ratio which determines if the image undergoes smoothing processing. Therefore, Horiuchi teaches making a smoothing processing determination based on an enlargement/reduction "ratio" whether the image data is either enlarged or reduced by comparing the ratio to a predetermined value. Furthermore, regardless of whether the image data is enlarged or reduced, the "final" magnification (or how large the image is after enlarging and/or reducing) is what determines if the image undergoes smoothing processing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jmares Washington whose telephone number is (571) 270-1585. The examiner can normally be reached on Monday thru Friday: 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, King Poon can be reached on (571) 272-7440. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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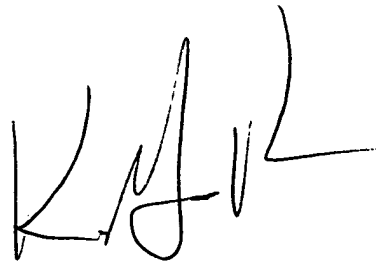
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Jamare Washington
Junior Examiner
Art Unit 2625


JW

January 28, 2008



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SUPERVISORY PATENT EXAMINER